

### Remarks

Applicants respectfully request reconsideration of the above referenced application in light of the Remarks that follow. Claims 1-36 are now pending in this application.

In the Office action dated July 18, 2006, the Examiner fully considered Applicants' Remarks filed on April 19, 2006 and deemed them to be persuasive. The Examiner withdrew the rejections of claims 1-36 issued in the Office Action dated October 20, 2005. Applicants thank the Examiner for the full consideration of Applicants' Remarks and the withdrawal of the rejections of claims 1-36 issued in the Office Action dated October 20, 2005.

In the Office action dated July 18, 2006, the Examiner rejected claims 1-36 based on newly found prior art. The Examiner rejected claims 1-11 under 35 U.S.C. 103(a) as being unpatentable over Magill et al. (U.S. Patent Application Publication No. 2004/0143542, hereinafter "Magill") in view of Gianakouros et al. (U.S. Patent 7,035,819 B1, hereinafter "Gianakouros"). Claims 12-36 were rejected under 35 U.S.C. 103(a) as being unpatentable over Magill in view of Gianakouros in view of Lupien et al. (U.S. Patent No. 5,689,652, hereinafter "Lupien"). Applicants respectfully traverse each of the rejections.

The Applicants' Remarks, set forth below, are preceded by related comments of the Examiner set forth in small indented bold-faced type.

**Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable by Magill et al. (hereinafter Magill, US 2004/0143542) in view of Gianakouros et al. (hereinafter Gianakouros US 7,035,819 B1).**

**Re Claim 1: Magill discloses a system and method for interactive electronic open order book for securities transactions comprising the steps of:**

- **Identifying an NBBO price range (paragraph 0085; nationally disseminated best bid/ask);**
- **Calculating a midpoint between said buy order price and said sell order price (paragraph 0085) and;**

**Magill does not explicitly disclose:**

- **Determining if said buy order price and said sell order price are within said NBBO range (paragraph 0085);**
- **Determining if said buy order price is not less than said sell order price;**
- **Matching said buy order and said sell order at said midpoint if said buy order is not less than said sell order price and said buy order price and said sell order price are within said NBBO range (paragraph 0085).**

Gianakouros discloses a method and system for facilitating automated interaction of marketable retail orders wherein a determination is made as to whether the buy order price and sell order price are within an NBBO range (Column 1 lines 53-56 and Column 3 line 64-Column 4 line 5 "Retail Marketable Orders."). It would have been obvious to a person of ordinary skill in the art to modify Magill in view of Gianakouros

Applicants respectfully traverse the Examiner's rejection. As the MPEP recites:

*"To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaecck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)."*

MPEP § 2142, emphasis added.

Applicants respectfully submit that the Examiner has not established a prima facie case of obviousness because (a) there is no motivation to modify or combine the reference teachings and (b) even if the references were combined, none of the prior art references, alone or in combination, describe or suggest all of the claimed limitations of claim 1.

(a) There is no motivation to modify or combine the reference teachings:

Applicants respectfully submit that the teaching or suggestion to make the claimed combination is not found in either Magill or Gianakouros. In fact, Applicants respectfully submit that Gianakouros teaches away from Applicants' claim 1 in several regards.

As an initial matter, Gianakouros teaches a system that collects "binding indications of interest to buy and sell specific equity securities at passively determined, non-discrete prices" (Gianakouros, col. 3, lines 29-32.) Gianakouros further teaches that binding indications of interest to buy or sell specific equity securities submitted to the system without an associated price limit, represent the submitting institution's willingness to trade at the midpoint of the NBBO (whatever this price happens to be):

*These institution-to-institution crosses will generally occur at the midpoint of the NBBO whenever institutional clients willing to transact with non-retail trading interest enter two or more offsetting institutional indications.*

*In an embodiment of the present invention, the indications of interest are entered into the System by institutional clients and can include, for example, the following information: side (buy or sell), security symbol, number of shares, and maximum or minimum price (optional). For as long as an indication, or a residual portion thereof, is active in the System, the indication represents the submitting institution's willingness to interact with offsetting retail marketable orders (and, at the submitting institutions option, offsetting institutional indications) at the midpoint of the NBBO. This interaction would result in trades for the institution on the specified side of the specified symbol up to an aggregate quantity equal to the specified (or remaining) number of shares.*

Gianakouros, Col. 4, lines 29– 46.

Applicants respectfully submit that, as opposed to Gianakouros' system, Applicants' claim 1 requires "calculating a midpoint between said buy order price and said sell order price" and "matching said buy order and said sell order at said midpoint if said buy order price is not less than said sell order price and said buy order price and said sell order price are within said NBBO range."

Next, Gianakouros describes two examples of how the system would handle indications which had been submitted to the system with an associated price limit. Gianakouros teaches that if the submitted indication is to buy shares, and the price limit associated with it is outside of and higher than the NBBO range, then the transaction will be executed at the midpoint of the NBBO. Gianakouros also teaches that if the submitted indication is to buy shares, and the price limit associated with it is outside of and lower than the NBBO range, then the transaction will not take place:

*Transactions on the System are also subject to any limits specified by the submitting institution governing the maximum or minimum price at which it is willing to transact. For example, an institutional indication to buy 50,000 shares of IBM "up to" 1321/4 signifies the submitting institution's willingness to buy up to a total of 50,000 shares of IBM at the (variable) midpoint of the NBBO, as long as it never transacts at a price greater than 1321/4. This indication would therefore be "active" when, for example, the NBBO for IBM is 1315/8.times.1313/4 (in which market the institution would buy from counter-parties at 131 11/16, the market midpoint), but would be "inactive" when, for example, the NBBO for IBM is 1323/8.times.1321/2 (since the midpoint of this market, 132 7/16, exceeds the institutional indication's price limit of 1321/4). An inactive indication present in the System would not result in any trades, just as if the indication did not exist at*

*all. It should be noted that price limits for indications are strictly optional and they are included and specified at the sole discretion of institutional clients submitting indications. An indication submitted without an associated price limit would simply represent the submitting institution's willingness to trade at the midpoint of the NBBO (whatever this price happens to be) on the specified side of the specified symbol up to the specified number of shares. Unless explicitly indicated otherwise, all indications used in the following descriptions of various embodiments of the present invention can be assumed to be active.*

Gianakouros, Col. 4, line 29 – Col. 5, line 6.

Again, Applicants respectfully submit that, as opposed to Gianakouros' system, Applicants' claim 1 requires that "calculating a midpoint between said buy order price and said sell order price" and "matching said buy order and said sell order at said midpoint if said buy order price is not less than said sell order price and said buy order price and said sell order price are within said NBBO range."

Furthermore, Gianakouros also teaches that when transactions occur between institutional clients and retail investors, orders and indications will be matched at points within the NBBO spread that are not equidistant from the NBBO midpoint, in order to provide order flow remuneration to the retail brokerage firm (see also Gianakouros, Example 1 Col. 14, line 17 – Col. 15, line 18):

*Although a variety of execution-price protocols are possible, in one embodiment of the present invention, one quarter of the NBBO spread for each retail share executed on the System against an institutional indication will accrue to the end retail investor in the form of "guaranteed" price improvement (that is, retail investors whose orders are executed on the System would always buy at a price 1/4 spread lower than the national best offer and sell at a price 1/4 spread higher than the national best bid), and that another quarter of the NBBO spread will accrue to the originating retail brokerage firm pursuant to a revenue-sharing arrangement. The remaining 50% of the NBBO spread will always go to the institutional client in the form of a midpoint execution. The System will generate proprietary revenue (which is not expected to be re-distributed to brokerage partners as order flow remuneration) by charging these institutional clients a per-share commission for trades on the System.*

Gianakouros, Col. 13, line 61 – Col. 14, line 12.

Moreover, the Examiner states in reference to the combination of Magill's and Gianakouros' teachings that "[i]n requiring that orders are within the NBBO range, the system decreases the odds of outlier bids being placed and increases the overall liquidity of the system." However, Applicants respectfully submit that Gianakouros does not require that binding orders and indications are within the NBBO range. In Gianakouros, binding orders and indications are accepted with price limits that may be outside of the NBBO range (Col. 4, lines 47-57, and Col. 14, line 21 – Col. 15, line 18.)

For the foregoing reasons, Applicants respectfully submit that Gianakouros in fact teaches away from at least the limitations of Applicants' claim 1 "calculating a midpoint between said buy order price and said sell order price" and "matching said buy order and said sell order at said midpoint if said buy order price is not less than said sell order price and said buy order price and said sell order price are within said NBBO range." Therefore, Applicants respectfully submit that it would not have been obvious to a person of ordinary skill in the art to modify Magill in view of Gianakouros to obtain Applicants' method as recited in claim 1.

Applicants respectfully further submit that one of skill in the art would not have been motivated to combine Magill and Gianakouros, because Magill's invention is a system and method for interactive electronic open order book for securities transactions which is displayed to securities buyers or sellers, and contains "data describing a plurality of current bid prices and a plurality of current ask prices of a specified security and an identification of the security" (Magill, abstract.) Magill's system is targeted at Subscribers via the internet (i.e. individual securities traders) (Magill, para. [0004]- para. [0009].) Gianakouros, on the other hand, teaches "[a] method and system for an automated network that continuously collects invisible, anonymous, binding orders and indications of interest to buy and sell specific equity securities at variable, passively determined prices and, then, executes trades based on these collected orders and indications" (Gianakouros, abstract, emphasis added). Gianakouros' system is targeted to professional market participants (e.g. Gianakouros, Col. 3, lines 10-14, 26-32, and 56-64.)

In addition, Magill states "[t]he system of the invention in its preferred embodiment employs an order-matching algorithm designed to seek the best mutual matching price" (Magill, para. [0085].) Gianakouros' system however, while being able to provide some price improvement, is not "designed to seek the best mutual matching price." As earlier discussed,

Gianakouros teaches that when transactions occur between institutional clients and retail investors, transactions will be matched at points within the NBBO spread that are not equidistant from the midpoint in order to provide order flow remuneration to the retail brokerage firm (see also Gianakouros, Example 1 Col. 14, line 17 – Col. 15, line 18.) Moreover, even when transactions occur by institution-to-institution crosses, and the indications of interest to buy or sell are executed at the midpoint of the NBBO, Gianakouros' system does not seek the "best mutual matching price." Gianakouros does not teach at which matching price indications would be executed in the instance for example, that institutional clients associate limit prices to their indications that are not equidistant from the NBBO's midpoint (whether inside or outside of the NBBO range), yet complementary and overlapping in range (therefore resulting in a viable trade.)

The Examiner has provided the following arguments to support his statement that it would have been obvious to a person of ordinary skill in the art to modify Magill in view of Gianakouros:

**It would have been obvious to a person of ordinary skill in the art to modify Magill in view of Gianakouros so that the participants in the system receive a higher degree, on average, of price improvement. In requiring that orders are within the NBBO range, the system decreases the odds of outlier bids being placed and increases the overall liquidity of the system. By maintaining a level of consistency with regards to the range of bids and offers accepted, the system will be more likely to create a match that is efficient in terms of speed and in terms of price for both parties. Furthermore, matching at the midpoint of the matched offers ensures that the most equitable agreement is reached, without one side of the transaction achieving a higher degree of price improvement than the other.**

As discussed earlier, Gianakouros teaches a system whereby binding indications of interest to buy and sell specific equity securities are matched at the midpoint of the NBBO, whatever this price happens to be. Applicants respectfully submit that such a system is described in Applicants' specification as prior art:

*Prior art systems exist for matching buy and sell orders in a particular security. These systems, also called crossing networks, match buyers and sellers using any of a number of algorithms. For example, POSIT, a crossing network owned by ITG, Inc., matches buyers and sellers at the midpoint of the prevailing national best bid and offer (the "NBBO")*  
(Specification, pg. 4, lines 12-15).

Applicants respectfully submit that this appears to be a case in which the Examiner's conclusion of "obviousness" is merely based on an application of hindsight reasoning gained by the Examiner's review of the present application. Such hindsight reasoning is impermissible.

As the MPEP notes:

*"The tendency to resort to "hindsight" based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art."*

MPEP § 2142; and

*"When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to:(...)  
(C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention (...) Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986)."*

MPEP § 2141 II

Thus, Applicants respectfully submit that the Examiner's conclusion that it would have been obvious to one of ordinary skill in the art is unsupported by the cited Magill and Gianakouros references.

(b) Even if the references were combined, none of the prior art references, alone or in combination, describe or suggest all of the claimed limitations of the present invention:

Even if Magill and Gianakouros were combined, none of the references, alone or in combination, describe or suggest all of the claimed limitations of at least independent claim 1. As the Examiner has stated, Magill does not explicitly disclose: a) determining if said buy order price and said sell order price are within said NBBO range, b) determining if said buy order price is not less than said sell order price, and c) matching said buy order and said sell order at said midpoint if said buy order is not less than said sell order price and said buy order price and said sell order price are within said NBBO range. As earlier discussed, Gianakouros does not teach at least the limitations "determining if said buy order price is not less than said sell order price" and "matching said buy order and said sell order at said midpoint if said buy order is not less than said sell order price and said buy order price and said sell order price are within said NBBO range."

Thus, and in further light of the above, Applicants respectfully submit that independent claim 1 is distinguishable over Magill in view of Gianakouros, and notice to the effect that this claim is in condition for immediate allowance is respectfully requested.

Claims 2-11 depend from independent claim 1, and each defines further features of the method. As such, these claims are patentable for the reasons noted above with respect to claim 1, as well as for the additional features recited therein. As stated in the Remarks filed on April 19, 2006, beyond the calculation of the midpoint between the buy and sell order prices, Magill does not teach a particular strategy of price improvement: "In the event that the mid-point is not between the nationally disseminated best bid and ask prices (the NBBO), the system will look for a price at which it can match a price equal to or better than the NBBO." (Id.) This statement is vague, and it is unclear how Magill makes adjustments to the matching price in case the midpoint between the buy and sell order prices does not fall within the NBBO. Applicants' Specification, on the other hand, delineates the strategy of price improvement based on a set of different possible scenarios, as claimed in the methods of claims 2-4. Gianakouros' price "improvement" strategy greatly differs from Applicants' as explained in detail above. Accordingly, notice to the effect that dependent claims 2-11 are in condition for immediate allowance is respectfully requested.

**Claims 12-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Magill in view of Gianakouros in view of Lupien et al. (hereinafter Lupien, US Pat 5,689,652).**

The Examiner has rejected claims 12-36 under 103(a) over Magill in view of Gianakouros in view of Lupien.

Applicants respectfully submit that the Examiner has not established a prima facie case of obviousness because (a) there is no motivation to modify or combine the reference teachings and (b) even if the references were combined, none of the prior art references, alone or in combination, describe or suggest all of the claimed limitations of claim 1.



(a) There is no motivation to modify or combine the reference teachings:

The Examiner has stated that “[i]t would have been obvious to someone skilled in the ordinary art at the time of invention to include the teachings of Lupien to the disclosure of Magill in view of Gianakouros, so that there is an efficient system in place to both record buy and sell orders in a database, compare said buy and sell orders and match orders appropriately” (emphasis added.) Nonetheless, Applicants respectfully note that Magill, Gianakouros and Lupien, show that there is an array of price matching strategies, all of which differ from that of Applicants’. Therefore, Applicants’ respectfully disagree with the Examiner’s conclusion that it would have been obvious to someone skilled in the ordinary art at the time of invention to include the teachings of Lupien to the disclosure of Magill in view of Gianakouros, without an application of impermissible hindsight reasoning gained by review of the present application.

Applicants will no further discuss at this time additional arguments to support that there is no motivation to modify or combine the reference teachings.

(b) Even if the references were combined, none of the prior art references, alone or in combination, describe or suggest all of the claimed limitations of the present invention:

Claims 12-20 depend on claim 1, either directly, or indirectly, and each defines further features of the method. As such, these claims are patentable for the reasons noted above with respect to claim 1, as well as for the additional features recited therein.

As stated in the Applicants’ Remarks filed on April 19, 2006, and as acknowledged by the Examiner in the July 18, 2006 Office Action, Applicants respectfully submit that claims 12-19 and 21-36 cannot be rendered obvious in view of Magill in view of Gianakouros and in further view of Lupien for at least the reason that the limitation of “passive orders” is not taught or suggested. Applicants respectfully disagree with the Examiner’s assertion that “anonymous” is equivalent to “passive.” Applicants respectfully submit that the meaning of the term “anonymous” is not clearly defined in Lupien. These are some citations from Lupien where “anonymous” appears to mean “computerized”:

- “Various companies and exchanges operate computerized crossing networks, also called anonymous matching systems” (Lupien, col. 1, lines 36-38);

- “Instinet allows parties to trade anonymously, entering bids electronically” (Lupien, col. 2, lines 16-18); and
- “The trades that result from these negotiations become public information only when they are executed. This procedure provides an alternative to the direct human-to-human negotiation of orders in the upstairs market or on the trading floors” (Lupien, col. 2, lines 21-25).

On the other hand, Applicants’ Specification uses a different term to “anonymous”: “passive orders”, which is specifically defined as including “orders that are designated as “not held,” “cross only” and “do not represent” orders, thereby indicating that these orders are to be kept confidential. If crossing network 3 is operated by a financial institution, then passive order flow source 5 may include orders from customers that the financial institution is required to keep confidential even from traders and salespersons within the financial institution. Passive order flow source 5 may also include proprietary orders (i.e., orders on behalf of the financial institution) that the financial institution does not want to route externally.” (Page 9, 2<sup>nd</sup> full para., line 2 to page 10, line 4). Applicants’ Specification further clarifies that “[f]or example, if an order is designated by a customer as a “cross only” order, then the financial institution cannot route these orders to external financial markets for execution and must instead attempt to execute the trade using another customer of the financial institution as a counterparty. If an order is designated as a “do not represent” order, then the financial institution cannot show interest to potential counterparties. A customer may designate an order as “cross only” and “do not represent” so that the customer’s intentions to transact in the security do not affect the market for the particular security. In this way, customers can have their orders executed by the financial institution while still maintaining confidentiality” (page 3, last para., line 2, to page 4, first para., line 6). Applicants respectfully submit that Lupien does not disclose such a definition of orders, and thus, Lupien does not teach at least the limitation of “passive orders” in claim 12 and in independent claim 21.

The Examiner has stated in the Office Action dated July 18, 2006 that “Lupien does however utilize the “cross only” function as defined by the applicant (see Figure 8).” However, as earlier stated, “passive orders” are defined in Applicants’ Specification as including “orders that are designated as “not held,” “cross only” and “do not represent.” Therefore, Magill in view

of Gianakouros and in further view of Lupien, even if combined, do not teach at least the claim limitation of “passive orders” recited in claims 12 and 21.

The Examiner has also stated that “Gianakouros discloses a crossing network similar to the one disclosed in the present application (See Column 8 line 29 – Column 11 line 14)” (emphasis added.) However, Applicants respectfully submit that the Examiner has not provided evidence demonstrating that Gianakouros teaches all the limitations of at least claims 12 and 21.

Claims 13-19 depend from claim 12, and claims 22-36 depend from claim 21, and each defines further features of the method. As such, these claims are patentable for the reasons noted above with respect to claims 12 and 21 as well as for the additional features recited therein.

Closing

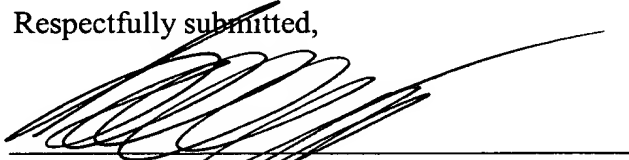
Claims 1-36 are pending and believed to be in condition for allowance. Applicants have made a diligent effort to place this application in better condition for immediate allowance and notice to this effect is earnestly solicited. The Examiner is respectfully requested to reconsider the application at an early date with a view towards issuing a favorable action thereon. If upon the review of the application, the Examiner is unable to issue an immediate notice of allowance, he is respectfully requested to telephone the undersigned attorney at the number listed below with a view towards resolving the outstanding issues.

For the reasons set forth above, allowance of this application is courteously urged. If there remain any questions regarding the present application or any of the cited references, or if the Examiner has any further suggestions for expediting allowance of the present application, the Examiner is cordially requested to contact the undersigned at (212) 895-1376 in order for the undersigned to arrange for an interview with the Examiner.

The Commissioner is authorized to charge and fees required in connection with this submission to Deposit Account No. 50-0521.

Date: December 18, 2006

Respectfully submitted,



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